



Complete Summary

TITLE

Asthma: percentage of members 5 to 50 years of age during the measurement year who were identified as having persistent asthma and who were appropriately prescribed medication during the measurement year.

SOURCE(S)

National Committee for Quality Assurance (NCQA). HEDIS® 2010: Healthcare Effectiveness Data & Information Set. Vol. 2, Technical Specifications. Washington (DC): National Committee for Quality Assurance (NCQA); 2009 Jul. 417 p.

Measure Domain

PRIMARY MEASURE DOMAIN

Process

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the [Measure Validity](#) page.

SECONDARY MEASURE DOMAIN

Does not apply to this measure

Brief Abstract

DESCRIPTION

This measure is used to assess the percentage of enrolled members 5 to 50 years of age during the measurement year who were identified as having persistent asthma and who were appropriately prescribed medication during the measurement year.

This process measure evaluates whether members with persistent asthma are being prescribed medications that are acceptable as primary therapy for long-term asthma control. The list of acceptable medications is derived from the National Heart, Lung and Blood Institute's (NHLBI) National Asthma Education Prevention Program (NAEPP) guidelines.

RATIONALE

Asthma is one of the nation's most common, costly, and increasingly prevalent diseases. Over 30 million Americans, including 8.5 million children, will suffer from asthma within their lifetime. Asthma medications help reduce underlying airway inflammation and relieve or prevent airway narrowing. Many asthma-related hospitalizations, emergency room visits and missed work and school days can be avoided if patients have appropriate medications and medical management.

PRIMARY CLINICAL COMPONENT

Asthma; antiasthmatic combinations; antibody inhibitor; inhaled steroid combinations; inhaled corticosteroids; leukotriene modifiers; mast cell stabilizers; methylxanthines

DENOMINATOR DESCRIPTION

Health plan members 5 to 50 years of age by December 31 of the measurement year with persistent asthma (see the "Description of Case Finding" and the "Denominator Inclusions/Exclusions" fields in the Complete Summary)

NUMERATOR DESCRIPTION

Dispensed at least one prescription for a preferred therapy during the measurement year (refer to Table ASM-D in the original measure documentation for a list of preferred asthma therapy medications) (see the related "Numerator Inclusions/Exclusions" fields in the Complete Summary)

Evidence Supporting the Measure

EVIDENCE SUPPORTING THE CRITERION OF QUALITY

- A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence
- A formal consensus procedure involving experts in relevant clinical, methodological, and organizational sciences
- One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

Evidence Supporting Need for the Measure

NEED FOR THE MEASURE

Use of this measure to improve performance
Variation in quality for the performance measured

EVIDENCE SUPPORTING NEED FOR THE MEASURE

National Committee for Quality Assurance (NCQA). The state of health care quality 2009. Washington (DC): National Committee for Quality Assurance (NCQA); 2009. 127 p.

State of Use of the Measure

STATE OF USE

Current routine use

CURRENT USE

Accreditation
Decision-making by businesses about health-plan purchasing
Decision-making by consumers about health plan/provider choice
External oversight/Medicaid
External oversight/State government program
Internal quality improvement
National reporting

Application of Measure in its Current Use

CARE SETTING

Managed Care Plans

PROFESSIONALS RESPONSIBLE FOR HEALTH CARE

Measure is not provider specific

LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED

Single Health Care Delivery Organizations

TARGET POPULATION AGE

Age 5 to 50 years

TARGET POPULATION GENDER

Either male or female

STRATIFICATION BY VULNERABLE POPULATIONS

Data are stratified by age, including children (5 to 11 years).

Characteristics of the Primary Clinical Component

INCIDENCE/PREVALENCE

See the "Rationale" field.

ASSOCIATION WITH VULNERABLE POPULATIONS

Unspecified

BURDEN OF ILLNESS

Nearly 5,000 Americans die of asthma each year. Many of those deaths could be avoided with improved disease management.

EVIDENCE FOR BURDEN OF ILLNESS

Thompson TG. Statement by HHS secretary Tommy G. Thompson regarding world asthma day. Washington (DC): U.S. Department of Health and Human Services; 2002 May 7.

UTILIZATION

- In 2004, there were 13.6 million physician office visits, 1 million hospital outpatient department visits and 1.8 million emergency room visits due to asthma.
- A 45 percent reduction in the risk of repeat emergency room visits was shown in patients using inhaled corticosteroid treatment compared with non-users.
- Asthma is the third leading cause of hospitalization among children under the 15 years of age.

EVIDENCE FOR UTILIZATION

Asthma & children fact sheet. [internet]. New York (NY): American Lung Association; [accessed 2007 Nov 28].

National Health Interview Survey Raw Data, 1997-2006. Analysis performed by American Lung Association research and program services using SPSS and SUDAAN software as reported by American Lung Association report. In: Centers for Disease Control and Prevention, National Center for Health Statistics. Trends in asthma and mortality. Atlanta (GA): Centers for Disease Control and Prevention; 2007 Nov.

Sin DD, Man SF. Low-dose inhaled corticosteroid therapy and risk of emergency department visits for asthma. Arch Intern Med 2002 Jul 22;162(14):1591-5.

[PubMed](#)

COSTS

- Asthma is the leading cause of school absenteeism attributed to chronic conditions.
- The annual economic cost of asthma is \$19.7 billion. Direct costs make up \$14.7 billion of that total, and indirect costs such as lost productivity add another \$5 billion.
- Prescription drugs represent the largest single direct medical expenditure related to asthma — over \$6 billion.

- Among children 5 to 17 years of age, asthma is the leading cause of school absences from a chronic illness. It accounts for an annual loss of more than 14 million school days per year (approximately 8 days for each student with asthma) and more hospitalizations than any other childhood disease.
- Asthma accounts for an estimated 14.5 million lost workdays for adults.
- Most asthma-related hospitalizations and emergency room visits are preventable, and nonacute asthma care can be shifted to the ambulatory setting to decrease costs.

EVIDENCE FOR COSTS

Akinbami L, Centers for Disease Control and Prevention National Center for Health Statistics. The state of childhood asthma, United States, 1980-2005. *Adv Data* 2006 Dec 12;(381):1-24. [PubMed](#)

American Lung Association, Epidemiology & Statistics Unit, Research and Program Services. Trends in asthma morbidity and mortality. New York (NY): American Lung Association; 2007 Nov.

Centers for Disease Control and Prevention, National Center for Health Statistics. Asthma prevalence, health care use and mortality: United States, 2003-05. [internet]. Atlanta (GA): Centers for Disease Control and Prevention; 2007 Jan

Gendo K, Lodewick MJ. Asthma economics: focusing on therapies that improve costly outcomes. *Curr Opin Pulm Med* 2005 Jan;11(1):43-50. [65 references] [PubMed](#)

National Committee for Quality Assurance (NCQA). The state of health care quality 2009. Washington (DC): National Committee for Quality Assurance (NCQA); 2009. 127 p.

National Health Interview Survey Raw Data, 1997-2006. Analysis performed by American Lung Association research and program services using SPSS and SUDAAN software as reported by American Lung Association report. In: Centers for Disease Control and Prevention, National Center for Health Statistics. Trends in asthma and mortality. Atlanta (GA): Centers for Disease Control and Prevention; 2007 Nov.

Institute of Medicine National Healthcare Quality Report Categories

IOM CARE NEED

Living with Illness

IOM DOMAIN

Effectiveness

CASE FINDING

Users of care only

DESCRIPTION OF CASE FINDING

Health plan members 5 to 50 years of age by December 31 of the measurement year with persistent asthma who were continuously enrolled during the measurement year and the year prior to the measurement year with no more than one gap in enrollment of up to 45 days during each year of continuous enrollment (commercial), or no more than a one-month gap in coverage during each year of continuous enrollment (Medicaid)

DENOMINATOR SAMPLING FRAME

Patients associated with provider

DENOMINATOR INCLUSIONS/EXCLUSIONS

Inclusions

Health plan members 5 to 50 years of age by December 31 of the measurement year with persistent asthma*

**Persistent asthma:* Refer to the original measure documentation for steps to identify members with persistent asthma.

Exclusions

(Optional) Members diagnosed with emphysema or chronic obstructive pulmonary disease (COPD), cystic fibrosis or acute respiratory failure (refer to Table ASM-E in the original measure documentation for codes to identify exclusions) any time on or prior to December 31 of the measurement year.

RELATIONSHIP OF DENOMINATOR TO NUMERATOR

All cases in the denominator are equally eligible to appear in the numerator

DENOMINATOR (INDEX) EVENT

Clinical Condition
Encounter
Institutionalization
Patient Characteristic
Therapeutic Intervention

DENOMINATOR TIME WINDOW

Time window precedes index event

NUMERATOR INCLUSIONS/EXCLUSIONS

Inclusions

Dispensed* at least one prescription for a preferred therapy during the measurement year (refer to Table ASM-D in the original measure documentation for a list of preferred asthma therapy medication)

*Definitions:

- *Oral medication dispensing event*: One prescription of an amount lasting 30 days or less. To calculate dispensing events for prescriptions longer than 30 days, divide the days supply by 30 and round down to convert. The organization should allocate the dispensing events to the appropriate year based on the date on which the prescription is filled.
- *Multiple prescriptions dispensed on the same day*: Multiple prescriptions for different medications dispensed on the same day should be assessed separately. If multiple prescriptions for the same medication are dispensed on the same day, the organization should sum the days supply and divide by 30.
- *Inhaler/injection dispensing event*: Inhalers and injections count as one dispensing event. In addition, multiple inhalers or injections of the same medication filled on the same date of service should be counted as one dispensing event. The organization should allocate the dispensing events to the appropriate year based on the date on which the prescription is filled.

Refer to the original measure documentation for additional details.

Exclusions

Unspecified

MEASURE RESULTS UNDER CONTROL OF HEALTH CARE PROFESSIONALS, ORGANIZATIONS AND/OR POLICYMAKERS

The measure results are somewhat or substantially under the control of the health care professionals, organizations and/or policymakers to whom the measure applies.

NUMERATOR TIME WINDOW

Fixed time period

DATA SOURCE

Administrative data
Pharmacy data

LEVEL OF DETERMINATION OF QUALITY

Individual Case

PRE-EXISTING INSTRUMENT USED

Unspecified

Computation of the Measure

SCORING

Rate

INTERPRETATION OF SCORE

Better quality is associated with a higher score

ALLOWANCE FOR PATIENT FACTORS

Analysis by subgroup (stratification on patient factors, geographic factors, etc.)

DESCRIPTION OF ALLOWANCE FOR PATIENT FACTORS

This measure requires that separate rates be reported for Medicaid and commercial product lines.

For each product line, the measure should be reported for each of two age stratifications (based on age as of December 31 of the measurement year) and as an overall rate:

- 5 to 11 years
- 12 to 50 years
- Total

The total is the sum of the two numerators divided by the sum of the two denominators.

STANDARD OF COMPARISON

External comparison at a point in time
External comparison of time trends
Internal time comparison

Evaluation of Measure Properties

EXTENT OF MEASURE TESTING

Unspecified

Identifying Information

ORIGINAL TITLE

Use of appropriate medications for people with asthma (ASM).

MEASURE COLLECTION

[HEDIS® 2010: Health Plan Employer Data and Information Set](#)

MEASURE SET NAME

[Effectiveness of Care](#)

MEASURE SUBSET NAME

[Respiratory Conditions](#)

DEVELOPER

National Committee for Quality Assurance

FUNDING SOURCE(S)

Unspecified

COMPOSITION OF THE GROUP THAT DEVELOPED THE MEASURE

National Committee for Quality Assurance's (NCQA's) Measurement Advisory Panels (MAPs) are composed of clinical and research experts with an understanding of quality performance measurement in the particular clinical content areas.

FINANCIAL DISCLOSURES/OTHER POTENTIAL CONFLICTS OF INTEREST

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ENDORSER

National Quality Forum

INCLUDED IN

Ambulatory Care Quality Alliance
National Healthcare Quality Report (NHQR)

ADAPTATION

Measure was not adapted from another source.

RELEASE DATE

2000 Jan

REVISION DATE

2009 Jul

MEASURE STATUS

This is the current release of the measure.

This measure updates a previous version: National Committee for Quality Assurance (NCQA). HEDIS® 2009: Healthcare Effectiveness Data & Information Set. Vol. 2, Technical Specifications. Washington (DC): National Committee for Quality Assurance (NCQA); 2008 Jul. various p.

SOURCE(S)

National Committee for Quality Assurance (NCQA). HEDIS® 2010: Healthcare Effectiveness Data & Information Set. Vol. 2, Technical Specifications. Washington (DC): National Committee for Quality Assurance (NCQA); 2009 Jul. 417 p.

MEASURE AVAILABILITY

The individual measure, "Use of Appropriate Medications for People with Asthma (ASM)," is published in "HEDIS® 2010. Healthcare Effectiveness Data & Information Set. Vol. 2, Technical Specifications."

For more information, contact the National Committee for Quality Assurance (NCQA) at 1100 13th Street, NW, Suite 1000, Washington, DC 20005; Telephone: 202-955-3500; Fax: 202-955-3599; Web site: www.ncqa.org.

COMPANION DOCUMENTS

The following is available:

- National Committee for Quality Assurance (NCQA). The state of health care quality 2009. Washington (DC): National Committee for Quality Assurance (NCQA); 2009. 127 p.

For more information, contact the National Committee for Quality Assurance (NCQA) at 1100 13th Street, NW, Suite 1000, Washington, DC 20005; Telephone: 202-955-3500; Fax: 202-955-3599; Web site: www.ncqa.org.

NQMC STATUS

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